UNITED STATES PATENT AND TRADEMARK OFFICE

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10/735,018	12/12/2003	Matthew Kenneth Gracie	56704.000109	2322

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/735,018	GRACIE ET AL.
	Examiner	Art Unit	
	JOHNNA R. LOFTIS	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 September 2008*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-53* is/are pending in the application.
     4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1 and 3-53* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
     a)☐ All   b)☐ Some *   c)☐ None of:
       1.☐ Certified copies of the priority documents have been received.
       2.☐ Certified copies of the priority documents have been received in Application No. _____.
       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 9/8/08 has been entered.

Response to Arguments

2.   Applicant's arguments have been fully considered, but are not found persuasive.

3.   Applicant argues that Antell et al does not disclose a basic question set that is asked of all

users. Examiner respectfully disagrees. As taught in the cited portions of Antell et al, question

sets are formulated from a list of potential questions, i.e., a basic question set is determined from

the overal question set which is asked of all users. Each user is asked at least two questions from

the possible questions stored.

4.   Applicant's arguments with respect to "predetermined sequenced criteria" and the

additional amendments to the claims have been considered but are moot in view of the new

ground(s) of rejection.

5.   In light of recent Supreme Court precedent and recent Federal Circuit decisions, the

claims warrant new rejections under 35 USC 101. These rejections are presented below.

Claim Rejections - 35 USC § 101

6.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 and 3-39 are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps fail the first prong of the new Federal Circuit decision since they are not tied to another statutory class and can be performed without the use of a particular apparatus. Thus, claims 1 and 3-39 are non-statutory since they may be performed within the human mind.

Claims 40-49 are also rejected as being directed toward non-statutory subject matter because they are software per se. Claim 40 recites several elements that appear to be software

modules or computer programs. As drafted, the claim fails to define any structural and

functional interrelationships between the software per se and other elements of the invention that

permit the software's function to be realized. (See MPEP § 2106 Section IV B 1 (a)).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that
> the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

8.   Claims 1, 3-6, 14-19, 23, 27-32, 36, 40-42, 46, 50-53 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Antell et al. (U.S. 2004/0123162) and Peters et al (US 5,842,195).

As per claim 1, Antell et al. discloses a computer-implemented method of compiling a

customer information set that complies with regulatory criteria, the method comprising:

providing an overall question set having a plurality of questions (paragraph 6; An overall

question set is used to select questions from.);

determining from the overall question set a basic question set asked of all users, wherein

each question of the basic question set is associated with an expected answer and wherein the

basic question set comprises the minimum number of sequenced questions the answers to which

would be sufficient to meet the regulatory criteria if no unexpected answers are given

(paragraphs 7-8, 24; The questions selected from the overall question set may be ordered (i.e.,

sequenced) and the answers are analyzed to determine if they match like information (i.e., are

expected) from a data source. Users are attempted to be authenticated by a maximum number of questions, thereby minimizing the number of questions asked.);

providing criteria for supplementing the basic question set with additional questions from the overall question set within the sequence of the basic question set, based on receiving an answer that differs from the expected answer, wherein the criteria are structured to minimize the number of remaining questions that must be answered in order to comply with the regulatory criteria (paragraphs 9, 22-23, 34; Additional questions may be posed when responses to the previously asked questions do not meet the authentication criteria. Users are attempted to be authenticated by a maximum number of questions, thereby minimizing the number of questions asked.); and

conducting an optimized interactive customer survey, comprising:

presenting each question of the basic question set to a user (paragraphs 7-8);

receiving from the user an answer to each basic question (paragraphs 7-8);

determining if the received answer is the expected answer for the question asked (paragraphs 7-8);

informing the customer of completion of the survey once the customer provides answers to a minimum number of questions needed to comply with the regulatory criteria (inherently once the authentication takes place, the customer is informed of the completeion of any survey questions and understands they have complied with the regulatory criteria).

Antell et al does not explicitly teach upon a determination that the received answer is the expected answer, continuing in the basic question set sequence to the next question in the basic question set; upon a determination that the received answer is not the expected answer,

presenting supplemental additional questions based on the predetermined sequenced criteria for

supplementing the basic question set and returning to the sequence of the basic question set once

th user provides the expected answer to the supplemental additional questions and repeating until

all questions have been asked and answered.

Peters et al teaches a series of branched-to-questions wherein based on a specific answer

(or non-answer) to a question, a series of linked questions are asked, otherwise, these branched-

to-questions are not asked and the survey continues (column 5, line 49 - column 6, line 22). aT

the time of the invention, it would have been obvious to one of ordinary skill in the art to modify

Antell et al with the branched questions as taught by Peters et al since the claimed invention is

merely a combination of old elements, and in the combination each element merely would have

performed the same function as it did separately, and one of ordinary skill in the art would have

recognized that the results of the combination were predictable.

As per claim 3, Antell et al. discloses a method according to claim 1, wherein the action

of conducting an optimized interactive customer survey includes:

displaying to a user the at least one question of the basic question set (see User Interface

(item 19) in Figure 1); receiving from the user an answer to the at least one question of the basic

question set (item 218 in Figure 2); determining whether the received answer differs from the

expected answer associated with the at least one question of the basic question set (item 222 in

Figure 2); responsive to a determination that the answer differs from the expected answer

associated with the at least one question of the basic question set, establishing an updated

question set using the overall question set, the basic question set and the criteria for modifying

the basic question set (item 226 in Figure 2); and displaying to the user at least one question from

the updated question set (item 228 in Figure 2).

As per claim 4, Antell et al. discloses a method according to claim 1, further comprising:

constructing a customer information set using answers received during the optimized

interactive customer survey and storing the customer information set (paragraphs 6-7, 26; The

answers are used to authenticate a customer, thereby formulating a customer authentication set.).

As per claim 5, Antell et al. discloses a method according to claim 1, wherein the basic

question set includes a plurality of questions from the overall question set and wherein the action

of conducting an optimized interactive customer survey includes:

displaying a first display question set consisting of a plurality of questions from the basic

question set including at least one question having an associated answer ((item 19) in Figure 1);

receiving from the user an answer to the at least one question having an associated expected

answer (item 218 in Figure 2); determining whether the received answer differs from the

expected answer associated with the at least one question having an associated expected answer

(item 222 in Figure 2); and responsive to a determination that the answer differs from the

expected answer, establishing an updated question set using the overall question set, the basic

question set and the criteria for modifying the basic question set and displaying a question set

consisting of a plurality of questions from the updated question set (item 226 in Figure 2), and

displaying a second question set that is different from the first displayed question set (item 228 in

Figure 2).

As per claim 6, Antell et al. discloses a method according to claim 1 further comprising:

associating an anticipated answer set with at least one of the plurality of supplemental

additional questions, the anticipated answer set comprising at least one anticipated answer and

responsive to receiving during the optimized interactive customer survey an answer to the at least

one of the plurality of supplemental additional questions that matches one of the at least one

anticipated answer, determining a risk contribution factor to be associated with the received

answer (paragraphs 24, 31-32, 34; Table C allows different values to be assigned to different

answers. Anticipated answers may be assigned points and a scoring according to the

authentication criteria is performed where the scoring is an indication of whether or not the user

has been authenticated (i.e., indicating a risk of unauthentication).).

As per claim 14, Antell et al. discloses a method according to claim 1, wherein the action

of conducting an optimized interactive customer survey is carried out as part of a front-end

customer identification procedure (paragraph 6).

As per claim 15, Antell et al. discloses a method according to claim 1 further comprising:

determining for at least one basic question set whether an answer to the at least one basic

question set may be determined from non-customer-supplied information (paragraph 6; It is

determined if answers to questions may be obtained from other data sources.). Antell et al. does

not expressly disclose responsive to a determination that an answer to the at least one basic

question set may be determined from non-customer-supplied information, removing the at least

one basic question set from the basic question set. However, Examiner takes Official Notice that

it is old and well known in the art of customer surveys to not ask a customer a question that has

already been answered/obtained to avoid repetition and inconveniencing the customer.

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill

in the art to modify Antell et al. to remove a question to be asked of the customer if the answer

has already been obtained by a non-customer means as doing so enhances convenience of taking

the survey for the user as the user has less questions to answer.

Claims 16-19, 23, 27-32, 36, 40-42, 46, 50-53 recite substantially similar subject matter

to claims 1, 3-6, 14, and 15 above. Therefore, claims 16-19, 23, 27-32, 36, 40-42, 46, 50-53 are

rejected on the same basis as claims 1, 3-6, 14, and 15 above.

9.   Claims 7-13, 20-22, 24-26, 33-35, 37-39, 43-45, 47-49 are rejected under 35 U.S.C.

103(a) as being unpatentable over Antell et al. (U.S. 2004/0123162) and Peters et al (US

5,842,195, further in view of Nagan et al. (U.S. 2003/0126049).

As per claims 7-13, the combination of Antell et al. and Peters et al does not expressly

disclose a method according to claim 6 wherein the risk contribution factor is determined from a

predetermined risk contribution factor value associated with the at least one anticipated answer;

wherein the risk contribution factor is determined based on a risk factor calculation that uses a

first predetermined risk factor value, the first predetermined risk factor value being associated

with the at least one anticipated answer; wherein the risk factor calculation also uses a second

predetermined risk factor value, the second predetermined risk factor value being associated with

a second anticipated answer that has been matched by a received answer; or determining an

aggregate risk value. Nagan et al. discloses anticipated answers have predetermined risk

contribution factor values. Total risk factors are calculated by adding the risk contribution factor

values of each response submitted by the customer (paragraphs 46-47, 65-66). At the time of the

invention, it would have been obvious to a person of ordinary skill in the art to modify the

combination of Antell and Peters to determine a risk contribution factor for each anticipated

answer and determine an aggregate risk value because doing so allows the system to factor in

"degrees" or levels of risk indicating "degrees" or levels of unauthentication, thereby enabling

the system to assess "how close" a customer is to being authenticated and therefore assess how

many additional questions may be required to authenticate the customer.

Claims 20-22, 24-26, 33-35, 37-39, 43-45, 47-49 recite substantially similar subject

matter to claims 7-13 above. Therefore, claims 20-22, 24-26, 33-35, 37-39, 43-45, 47-49 are

rejected on the same basis as claims 7-13 above.

Conclusion

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JOHNNA R. LOFTIS whose telephone number is (571)272-

6736. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Beth Boswell can be reached on 571-272-6737. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/jl/
9/21/08
/Jonathan G. Sterrett/
Primary Examiner, Art Unit 3623